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MEMORANDUM

TO: Chris Lichens, Remedial Project Manager
Site Cleanup Section 4, SFD-7-4

THROUGH: Rose Fong, ESAT Task Order Manager (TOM) RF
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00105001

DATE: August 3, 2006

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Omega Chem OU2
Site Account No.:	09 BC LA02
CERCLIS ID NO.:	CAD042245001
Case No.:	33335
SDG No.:	Y1FR9
Laboratory:	Shealy Environmental Services (SHEALY)
Analysis:	Volatiles
Samples:	20 Groundwater Samples (see Case Summary)
Collection Date:	September 13 through 16, 2004
Reviewer:	April Martinez, ESAT/Laboratory Data Consultants

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] Attention [X] Action

SAMPLING ISSUES: [X] Yes [ ] No

Data Validation Report

Case No.: 33335
SDG No.: Y1FR9
Site: Omega Chem OU2
Laboratory: Shealy Environmental Services (SHEALY)
Reviewer: April Martinez, ESAT/LDC
Date: August 3, 2006

I. CASE SUMMARY

Sample Information

Samples:	Y1FR9 through Y1FT8
Concentration and Matrix:	Low Concentration Water
Analysis:	Volatiles
SOW:	OLC03.2
Collection Date:	September 13 through 16, 2004
Sample Receipt Date:	September 15 through 17, 2004
Extraction Date:	Not Applicable
Analysis Date:	September 18, 19, 20, 22, 23, and 24, 2004

Field QC

Field Blanks (FB):	Y1FR9 and Y1FT0
Equipment Blanks (EB):	Not Provided
Trip Blank (TB):	Not Provided
Background Samples (BG):	Not Provided
Field Duplicates (D1):	Y1FS1 and Y1FS2
Field Duplicates (D2):	Y1FT5 and Y1FT6

Laboratory QC

Method Blanks & Associated Samples:

VBLK18:	Y1FR9 and Y1FS0DL through Y1FS8DL
VBLK19:	Y1FS1
VBLK20:	Y1FS0, Y1FS2 through Y1FS8, Y1FT5, and Y1FT7
VBLK22:	Y1FS9, Y1FT0, and Y1FT2
VBLK23:	Y1FT1, Y1FT3DL, and Y1FT4DL
VBLK24:	Y1FT3, Y1FT4, Y1FT6, and Y1FT8
VBLK28:	Storage blank VHBLK97

Tables

1A: Analytical Results with Qualifications
1B: Data Qualifier Definitions for Organic Data Review
2: Calibration Summary

CLP PO Action

Nondetected results for 4-methyl-2-pentanone in method blank VBLK28 and storage blank VHBLK97 are qualified as rejected (R) due to very low response factors (<0.01) in the continuing calibration (see Comment A).

CLP PO Attention

1. Detected results for some analytes are qualified as nondetected and estimated (U,J) due to method blank and field blank contamination (see Comment C).

2. Results for some analytes are qualified as estimated (J) due to calibration problems (see Comments D, E, and F).

3. Results for some analytes are qualified as estimated (J) due to deuterated monitoring compound (DMC) recovery problems (see Comment G).

4. Results for trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethene, and tetrachloroethene in sample Y1FT8 are qualified as estimated (J) due to concentrations exceeding calibration ranges (see Comment H).

5. Results for all analytes in sample Y1FT6 are qualified as estimated (J) due to a holding time problem (see Comment I).

Sampling Issues

1. Detected results for chloroform in some samples are qualified as nondetected and estimated (U,J) due to field blank contamination (see Comment C).

2. One vial for sample Y1FT6 and two vials for sample Y1FT7 were broken when received by the laboratory. There was enough sample in the other vials for analysis.

3. The traffic report & chain of custody records (TR/COCs; attached, p. 4 through 6 in data package) incorrectly stated "(Ice Only)" for samples Y1FS0, Y1FS2, Y1FS6, Y1FT2 through Y1FT5, Y1FT7, and Y1FT8. The sampler indicated that "All VOAs were pre-preserved with HCL" (see attached electronic mail dated 07/27/06). The SDG Narrative (attached), however, indicated that the pH of sample Y1FT6 was 7. Results for sample Y1FT6 were qualified as estimated (J) since the analysis exceeded the 7-day holding time for unpreserved water sample (see Comment I).

4. Field blanks were not submitted "blind" to the laboratory since "Ambient Blank" was used as the "matrix" on the TR/COCs (attached, p. 4 through 6 in data package).

Additional Comments

Other than a laboratory artifact (approximate retention time of 4.4 minutes), tentatively identified compounds (TICs) were found in samples Y1FS1 and Y1FT8 (see attached Form 1LCFs).

The laboratory performed manual integrations on calibrations due to incorrect auto integration. Manual integrations were reviewed and found to be satisfactory and in compliance with proper integration techniques.

This report was prepared in accordance with the following documents:

- ESAT Region 9 Standard Operating Procedure 901, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Volatile and Semivolatile Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work for Analysis of Low Concentration Organic,* OLC03.2, December 2000; and
- USEPA Contract Laboratory Program National Functional Guidelines for Low Concentration Organic Data Review, June 2001.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Holding Time/Preservation	No	I
2.	GC/MS Tune/GC Performance	Yes	
3.	Initial Calibration	No	D, E
4.	Continuing Calibration	No	A, D, F
5.	Laboratory Blanks	No	C
6.	Field Blanks	No	C
7.	Deuterated Monitoring Compounds	No	G
8.	Matrix Spike/Matrix Spike Duplicates	N/A	
9.	Laboratory Control Samples/Duplicates	N/A	
10.	Internal Standards	Yes	
11.	Compound Identification	No	M
12.	Compound Quantitation	No	B, H, K, L, M
13.	System Performance	Yes	
14.	Field Duplicate Sample Analysis	No	J

N/A = Not Applicable

III. VALIDITY AND COMMENTS

A. Nondetected results for the following analyte are qualified as rejected due to a very low relative response factor (RRF) in the continuing calibration and are flagged "R" in Table 1A.

- 4-Methyl-2-pentanone in method blank VBLK28 and storage blank VHBLK97

A relative response factor (RRF) of 0.004 was reported for 4-methyl-2-pentanone in the 09/28/04 continuing calibration. This value is well below the 0.05 validation criterion. Since results are nondetected, false negatives may exist.

The RRF evaluates instrument sensitivity and is used in the quantitation of target analytes.

B. The following results, denoted with an "L" qualifier, are estimated and flagged "J" in Table 1A.

- All detected results below the contract required quantitation limits

Results below the contract required quantitation limits (CRQLs) are considered to be qualitatively acceptable, but quantitatively unreliable, due to the uncertainty in analytical precision near the limit of detection.

C. The following results are qualified as nondetected and estimated due to method blank and field blank contamination and are flagged "U,J" in Table 1A.

- Bromomethane in samples Y1FS1, Y1FS2, and Y1FS5
- Methylene chloride in samples Y1FR9 through Y1FS8, Y1FT0, Y1FT3, and Y1FT6 and storage blank VHBLK97
- Chloroform in samples Y1FS0 through Y1FS3, Y1FS9, and Y1FT1 through Y1FT4
- Benzene in samples Y1FS0, Y1FS3 through Y1FS7, Y1FS9, and Y1FT2 through Y1FT5
- Tetrachloroethene in samples Y1FT0 and Y1FT7
- Chlorobenzene in sample Y2FS2

Bromomethane was found in method blanks VBLK19, VBLK20, VBLK23, and VBLK28; methylene chloride was found in all method blanks; tetrachloroethene was found in method blanks VBLK19, VBLK20, VBLK22, and VBLK24; benzene was found in field blank Y1FT0 and method blanks VBLK20, VBLK24, and VBLK28; chlorobenzene was found in method blanks VBLK19, VBLK20, and VBLK22; and chloroform was found in field blanks Y1FR9 and Y1FT0 (see Table 1A for concentrations). Results for the samples listed above are considered nondetected and estimated (U,J) and quantitation limits have been raised according to blank qualification rules presented below.

No positive results are reported unless the concentration of the compound in the sample exceeds 10 times the amount in any associated blank for common laboratory contaminants or 5 times the amount for other compounds. If the sample result is greater than the CRQL, the quantitation limit is raised to the sample result and reported as nondetected. If the sample result is less than the CRQL, the result is reported as nondetected at the CRQL.

Chloroform results for samples Y1FS4, Y1FS5, Y1FS7, Y1FT5, Y1FT6, and Y1FT8 are not qualified as nondetected and estimated because field blank were not

collected on 09/14/04 and 09/16/04. Users should note that chloroform may be an artifact because it was found in field blanks Y1FR9 and Y1FT0.

A laboratory method blank is laboratory reagent water or baked sand analyzed with all reagents, deuterated monitoring compounds, and internal standards and carried through the same sample preparation and analytical procedures as the field samples. The laboratory method blank is used to determine the level of contamination introduced by the laboratory during analysis.

A field blank is clean water prepared as a sample in the field by the sampler and shipped to the laboratory with the samples. A field blank is intended to detect contaminants that may have been introduced in the field, although any laboratory introduced contamination will be present. Contaminants that are found in the field blank which are absent in the laboratory method blank could be indicative of a field QC problem, a deficiency in the bottle preparation procedure, a difference in preparation of the laboratory and field blanks, or other indeterminate error.

D. Results for the following analytes are qualified as estimated due to low relative response factors (RRFs) in initial and continuing calibrations and are flagged "J" in Table 1A.

- Acetone, 2-butanone, 2-hexanone, and 1,2-dibromo-3-chloropropane in all samples, all method blanks, and storage blank VHBLK97

Average RRFs were below the 0.05 validation criterion in the initial and continuing calibrations (see Table 2).

Detected results for the analytes listed above should be considered as the minimum concentrations at which these analytes are present in the samples. Where results are nondetected, false negatives may exist.

DMCs 2-butanone-d5 and 2-hexanone-d5 also had RRFs below the 0.05 validation criterion in the initial and continuing calibrations (see Table 2). Quantitation of the analytes associated with these DMCs may have been affected by the low RRFs (see attached Table 9 from the Functional Guidelines).

The RRF evaluates instrument sensitivity and is used in the quantitation of target analytes.

E. Results for the following analytes are qualified as estimated due to large percent relative standard deviations (%RSDs) in initial calibrations and are flagged "J" in Table 1A.

- Methyl acetate in all samples; all method blanks; and storage blank VHBLK97

- Methylene chloride and 1,2-dibromo-3-chloropropane in samples Y1FT3, Y1FT4, Y1FT6, and Y1FT8 and method blank VBLK24

Percent RSDs exceeded the ±30.0%/50.0% validation criterion for the analytes listed above in the initial calibrations (see Table 2).

The initial calibration demonstrates that the instrument is capable of acceptable performance in the beginning of the analytical run and of producing a linear calibration curve.

F. Results for the following analytes are qualified as estimated due to large percent differences (%Ds) in continuing calibrations and are flagged "J" in Table 1A.

- Methyl acetate in sample Y1FS1 and method blank VBLK19
- Methylene chloride in samples Y1FS0, Y1FS2 through Y1FT0, Y1FT2, Y1FT5, and Y1FT7 and method blanks VBLK20 and VBLK22
- Methylcyclohexane, 1,2,3-trichlorobenzene, and 1,2-dibromoethane in samples Y1FT3, Y1FT4, Y1FT6, and Y1FT8 and method blank VBLK24
- Dichlorodifluoromethane in samples Y1FR9, Y1FT3, Y1FT4, Y1FT6, and Y1FT8 and method blanks VBLK18 and VBLK24
- Bromomethane in samples Y1FS0, Y1FS2 through Y1FS8, Y1FT5, and Y1FT7 and method blank VBLK20
- 1,1,2-Trichloro-1,2,2-trifluoroethane in samples Y1FS0, Y1FS2 through Y1FS8, and Y1FT3 through Y1FT8 and method blanks VBLK20 and VBLK24
- 4-Methyl-2-pentanone in method blank VBLK28 and storage blank VHBLK97

%Ds exceeded the ±30.0%/50.0% validation criterion for the analytes listed above in the continuing calibrations (see Table 2).

Users should note that results for 4-methyl-2-pentanone in method blank VBLK28 and storage blank VHBLK97 were previously qualified as rejected (see Comment A).

The continuing calibration checks the instrument performance daily and produces the relative response factors (RRFs) for target analytes that are used for quantitation.

G. Results for the following analytes are qualified as estimated due to DMC recoveries outside QC limits and are flagged "J" in Table 1A.

{1,1-Dichloroethene-d2}

- cis-1,2-Dichloroethene in samples Y1FS0 through Y1FS2, Y1FS4, Y1FS6, Y1FS8, and Y1FT8

{Chloroethane-d5}

- Chloromethane in samples Y1FS1, Y1FS2, Y1FS5, Y1FS7, and Y1FS8

The DMC recoveries outside QC limits are shown below.

Sample	DMC	% Recovery	QC Limits
Y1FS6DL	1,1-Dichloroethene-d2	136	65-130
Y1FS1	1,1-Dichloroethene-d2	360	65-130
Y1FS2	1,1-Dichloroethene-d2	320	65-130
Y1FS4	1,1-Dichloroethene-d2	180	65-130
Y1FS6	1,1-Dichloroethene-d2	540	65-130
Y1FS0	1,1-Dichloroethene-d2	360	65-130
Y1FS8	1,1-Dichloroethene-d2	420	65-130
Y1FT8	1,1-Dichloroethene-d2	240	65-130
Y1FS1	1,2-Dichloroethane-d4	134	78-129
Y1FS1	Chloroethane-d5	142	60-126
Y1FS2	Chloroethane-d5	132	60-126
Y1FS5	Chloroethane-d5	132	60-126
Y1FS7	Chloroethane-d5	136	60-126
Y1FS8	Chloroethane-d5	136	60-126
Y1FT4DL	Chloroethane-d5	130	60-126
Y1FT3DL	Benzene-d6	126	78-121
Y1FT3DL	Bromoform-d	138	76-135

Detected results for affected analytes where DMC recoveries fell below QC limits may be biased low; where results are nondetected, false negatives may exist. For DMC recoveries that exceeded QC limits, only detected results for associated analytes are qualified. Recoveries for DMCs 1,2-dichloroethane-d4, benzene-d6, and bromoform-d exceeded QC limits but results were not qualified because they were nondetects. The samples were not reanalyzed.

Surrogates (e.g., deuterated monitoring compounds (DMCs)) are organic compounds which are similar to the target analytes in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples. All samples are spiked with DMCs prior to purging. DMCs provide information about both the laboratory performance on individual samples and the possible effects of the sample matrix on the analytical results.

H. Detected results for the following analytes are qualified as estimated due to concentrations exceeding the calibration range and are flagged "J" in Table 1A.

- Trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethene, and tetrachloroethene in sample Y1FT8

Concentrations of trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethene, and tetrachloroethene in the undiluted analysis of sample Y1FT8 were 25 µg/L, 31 µg/L, 71 µg/L, 270 µg/L, and 180 µg/L,

respectively. These values exceed the 0.5-25 μg/L calibration range. Due to a laboratory oversight, sample Y1FT8 was not analyzed at a dilution.

Results reported in Table 1A for these analytes are from the undiluted analysis. These concentrations are considered to be qualitatively acceptable but quantitatively questionable and should be considered as the minimum concentrations at which the analytes are present in the sample.

I. Results for the following analytes are qualified as estimated due to missed technical holding time and are flagged "J" in Table 1A.

- All analytes in sample Y1FT6

The analysis of sample Y1FT6 exceeded the 7-day 40 CFR 136 (Clean Water Act) technical holding time for unpreserved water samples as shown below.

Sample	Date Collected	Date Analyzed	# of Days Exceeded
Y1FT6	09/16/04	09/24/04	1

Detected results for sample Y1FT6 may be biased low. Where results are nondetected, false negatives may exist.

J. In the analysis of the field duplicate pairs, the following outliers were reported.

Analyte	Y1FS1 (D1) Conc., μg/L	Y1FS2 (D1) Conc., μg/L	RPD (<25%)
Methyl tert-butyl ether	9.2	6.6	33

Analyte	Y1FT5 (D2) Conc., μg/L	Y1FT6 (D2) Conc., μg/L	RPD (<25%)
Tetrachloroethene	8.2	6.1	29

The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix or poor sampling or laboratory technique.

K. Due to high levels of target analytes, samples Y2FS0 through Y2FS2, Y2FS4 through Y2FS8, and Y2FT3 were analyzed at a 10-, 10-, 10-, 2-, 10-, 5-, 5-, 10-, and 2-fold dilutions, respectively. The CRQLs listed for these samples in Table 1A have been multiplied by the dilution factor.

L. Samples Y1FS0, Y1FS1, and Y1FS2 were reanalyzed at 100-fold dilutions due to high levels of 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, and tetrachloroethene that exceeded the calibration range. Results for these analytes are

reported from the 100-fold diluted analyses in Table 1A; results for other analytes are reported from the 10-fold diluted analyses.

Samples Y1FS4 and Y1FS5 were reanalyzed at 25-fold and 100-fold dilutions, respectively, due to high levels of trichloroethene and tetrachloroethene that exceeded the calibration range. Results for these analytes are reported from the diluted analyses in Table 1A; results for other analytes are reported from the 2-fold and 10-fold diluted analyses, respectively.

Sample Y1FS8 was reanalyzed at a 100-fold dilution due to high levels of 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethene, and tetrachloroethene that exceeded the calibration range. Results for these analytes are reported from the 100-fold diluted analysis in Table 1A; results for other analytes are reported from the 10-fold diluted analysis.

Samples Y1FS7 and Y1FT3 were reanalyzed at 50-fold and 20-fold dilutions, respectively, due to high levels of tetrachloroethene that exceeded the calibration range. Results for tetrachloroethene are reported from the diluted analyses in Table 1A; results for other analytes are reported from the 5-fold and 2-fold diluted analyses, respectively.

Samples Y1FS3 and Y1FT4 were reanalyzed at 10-fold and 5-fold dilutions due to high level of trichloroethene that exceeded the calibration range. Results for trichloroethene are reported from the diluted analyses in Table 1A; results for other analytes are reported from the undiluted analyses.

Sample Y1FS6 was reanalyzed at a 50-fold dilution due to high levels of trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2- trifluoroethane, trichloroethene, and tetrachloroethene that exceeded the calibration range. Results for these analytes are reported from the 50-fold diluted analysis in Table 1A; results for all other analytes are reported from the 5-fold diluted analysis.

M. The laboratory reported a detected result for 2-butanone in sample Y1FS2 of 7.6 μg/L (below the CRQL of 50 μg/L for a 10-fold dilution). However, the mass spectrum does not meet National Functional Guidelines criteria. In the reviewer's professional judgment, 2-butanone in sample Y1FS2 should not be reported as detected because the characteristic ions m/z 57 and m/z 72 are missing in the sample mass spectra (attached, p. 133 in data package). The result for 2-butanone in sample Y1FS2 is reported in Table 1A as nondetected (50U).

ANALYTICAL RESULTS
Table 1A

Case No. : 33335 SDG No. : Y1FR9
Site : OMEGA CHEM OU2
Lab : SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer : April Martinez ESAT/LDC
Date : 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples For Volatiles

Station Location :	OC2-00-W-2-57			OC2-MW4A-W-0-58			OC2-MW4B-W-0-59			OC2-MW4B-W-1-60			OC2-MW4C-W-0-61			OC2-MW1B-W-0-62			OC2-MW1A-W-0-63		
Sample ID :	Y1FR9	FB		Y1FS0			Y1FS1	D1		Y1FS2	D1		Y1FS3			Y1FS4			Y1FS5		
Collection Date :	9/13/2004			9/13/2004			9/13/2004			9/13/2004			9/13/2004			9/14/2004			9/14/2004		
Dilution Factor :	1.0			10.0			10.0			10.0			1.0			2.0			10.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.50U	J	F	5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Chloromethane	0.50U			4.6L	J	BK	4.0L	J	BGK	4.4L	J	BGK	0.50U			1.0U		K	2.9L	J	BGK
Vinyl Chloride	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Bromomethane	0.50U			5.0U	J	FK	5.0U	J	CK	5.0U	J	CFK	0.50U	J	F	1.0U	J	FK	5.0U	J	CFK
Chloroethane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Trichlorofluoromethane	0.50U			160		K	200		K	170		K	5.9			7.3		K	57		K
1,1-Dichloroethene	0.50U			770		KL	660		KL	600		KL	6.2			34		K	71		K
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50U			750	J	FKL	820		KL	730	J	FKL	13	J	F	34	J	FK	200	J	FK
Acetone	5.0U	J	D	50U	J	DK	50U	J	DK	50U	J	DK	5.0U	J	D	10U	J	DK	50U	J	DK
Carbon Disulfide	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Methyl Acetate	0.50U	J	E	5.0U	J	EK	5.0U	J	EFK	5.0U	J	EK	0.50U	J	E	1.0U	J	EK	5.0U	J	EK
Methylene Chloride	0.50U	J	C	5.0U	J	CFK	5.0U	J	CK	5.0U	J	CFK	0.50U	J	CF	1.0U	J	CFK	5.0U	J	CFK
trans-1,2-Dichloroethene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Methyl tert-Butyl Ether	0.50U			7.2		K	9.2		JK	6.6		JK	0.50U			1.0U		K	5.0U		K
1,1-Dichloroethane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
cis-1,2-Dichloroethene	0.50U			2.4L	J	BGK	1.8L	J	BGK	1.5L	J	BGK	0.79			2.8	J	GK	39		K
2-Butanone	5.0U	J	D	50U	J	DK	50U	J	DK	50U		DKM	5.0U	J	D	10U	J	DK	50U	J	DK
Bromochloromethane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Chloroform	1.6			40U	J	CK	57U	J	CK	49U	J	CK	1.2U	J	C	1.6		K	7.4		K
1,1,1-Trichloroethane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Cyclohexane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Carbon Tetrachloride	0.50U			5.0U		K	5.0U		K	5.0U		K	0.073L	J	B	0.14L	J	BK	5.0U		K
Benzene	0.50U			5.0U	J	CK	5.0U		K	5.0U		K	0.50U	J	C	1.0U	J	CK	5.0U	J	CK
1,2-Dichloroethane	0.50U			5.0U		K	2.9L	J	BK	2.4L	J	BK	0.50U			1.0U		K	5.0U		K
Trichloroethene	0.50U			140		K	110		K	100		K	100		L	490		KL	540		KL
Methylcyclohexane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
1,2-Dichloropropane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Bromodichloromethane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
cis-1,3-Dichloropropene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
4-Methyl-2-pentanone	5.0U			50U		K	50U		K	50U		K	5.0U			10U		K	50U		K
Toluene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
trans-1,3-Dichloropropene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
1,1,2-Trichloroethane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Tetrachloroethene	0.50U			600		KL	510		KL	490		KL	20			74		KL	50		KL
2-Hexanone	5.0U	J	D	50U	J	DK	50U	J	DK	50U	J	DK	5.0U	J	D	10U	J	DK	50U	J	DK
Dibromochloromethane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
1,2-Dibromoethane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K

ANALYTICAL RESULTS
Table 1A

Case No. : 33335 SDG No. : Y1FR9
Site : OMEGA CHEM OU2
Lab : SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer : April Martinez ESAT/LDC
Date : 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	OC2-00-W-2-57			OC2-MW4A-W-0-58			OC2-MW4B-W-0-59			OC2-MW4B-W-1-60			OC2-MW4C-W-0-61			OC2-MW1B-W-0-62			OC2-MW1A-W-0-63		
Sample ID :	Y1FR9		FB	Y1FS0			Y1FS1		D1	Y1FS2		D1	Y1FS3			Y1FS4			Y1FS5		
Collection Date :	9/13/2004			9/13/2004			9/13/2004			9/13/2004			9/13/2004			9/14/2004			9/14/2004		
Dilution Factor :	1.0			10.0			10.0			10.0			1.0			2.0			10.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Chlorobenzene	0.50U			5.0U		K	5.0U		K	5.0U	J	CK	0.50U			1.0U		K	5.0U		K
Ethylbenzene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Xylenes (total)	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Styrene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Bromoform	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
Isopropylbenzene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
1,1,2,2-Tetrachloroethane	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
1,3-Dichlorobenzene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
1,4-Dichlorobenzene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
1,2-Dichlorobenzene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
1,2-Dibromo-3-chloropropane	0.50U	J	D	5.0U	J	DK	5.0U	J	DK	5.0U	J	DK	0.50U	J	D	1.0U	J	DK	5.0U	J	DK
1,2,4-Trichlorobenzene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K
1,2,3-Trichlorobenzene	0.50U			5.0U		K	5.0U		K	5.0U		K	0.50U			1.0U		K	5.0U		K

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation Limit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample

ANALYTICAL RESULTS
Table 1A

Case No. : 33335 SDG No. : Y1FR9
Site : OMEGA CHEM OU2
Lab : SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer : April Martinez ESAT/LDC
Date : 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	OC2-MW2A-W-0-64			OC2-MW6A-W-0-65			OC2-MW5A-W-0-66			OC2-MW9B-W-0-67			OC2-00-W-2-68 FB			OC2-MW8B-W-5-69			OC2-MW8C-W-0-70		
Sample ID :	Y1FS6			Y1FS7			Y1FS8			Y1FS9			Y1FT0			Y1FT1			Y1FT2		
Collection Date :	9/14/2004			9/14/2004			9/14/2004			9/15/2004			9/15/2004			9/15/2004			9/15/2004		
Dilution Factor :	5.0			5.0			10.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	2.5U		K	2.5U		K	5.0U		K	0.36L	J	B	0.50U			0.50U			0.50U		
Chloromethane	3.4		K	2.2L	J	BGK	3.6L	J	BGK	0.50U			0.50U			0.50U			0.50U		
Vinyl Chloride	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Bromomethane	2.5U	J	FK	2.5U		FK	5.0U		FK	0.50U			0.50U			0.50U			0.50U		
Chloroethane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Trichlorofluoromethane	320		KL	0.27L	J	BK	220		K	0.50U			0.50U			0.50U			0.50U		
1,1-Dichloroethene	550		KL	12		K	820		KL	0.50U			0.50U			0.50U			0.50U		
1,1,2-Trichloro-1,2,2-trifluoroethane	800	J	FKL	1.7L	J	BFK	930		FKL	0.50U			0.50U			0.50U			0.70		
Acetone	25U	J	DK	13L	J	BDK	50U	J	DK	5.0U	J	D	5.3	J	D	5.0U	J	D	5.0U	J	D
Carbon Disulfide	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Methyl Acetate	2.5U	J	EK	2.5U	J	EK	5.0U	J	EK	0.50U	J	E	0.50U	J	E	0.50U	J	E	0.50U	J	E
Methylene Chloride	2.5U	J	CFK	2.5U	J	CFK	5.0U	J	CFK	0.50U	J	F	0.50U	J	CF	0.50U			0.50U	J	F
trans-1,2-Dichloroethene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Methyl tert-Butyl Ether	5.8		K	2.5U		K	6.7		K	0.52			0.50U			0.50U			0.50U		
1,1-Dichloroethane	1.4L	J	BK	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
cis-1,2-Dichloroethene	28	J	GK	1.6L	J	BK	6.0		GK	0.75			0.50U			0.67			1.2		
2-Butanone	25U	J	DK	25U	J	DK	50U	J	DK	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D
Bromochloromethane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Chloroform	58		K	0.77L	J	BK	100		K	0.50U	J	C	1.5			0.50U	J	C	0.50U	J	C
1,1,1-Trichloroethane	2.5U		K	2.5U		K	0.99L	J	BK	0.50U			0.50U			0.50U			0.50U		
Cyclohexane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Carbon Tetrachloride	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Benzene	2.5U	J	CK	2.5U	J	CK	5.0U		K	0.50U	J	C	0.053L	J	B	0.50U			0.50U	J	C
1,2-Dichloroethane	5.1		K	2.5U		K	7.4		K	0.27L	J	B	0.50U			0.50U			0.50U		
Trichloroethene	270		KL	22		K	320		KL	1.6			0.50U			3.5			3.4		
Methylcyclohexane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
1,2-Dichloropropane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Bromodichloromethane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
cis-1,3-Dichloropropene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
4-Methyl-2-pentanone	25U		K	25U		K	50U		K	5.0U			5.0U			5.0U			5.0U		
Toluene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
trans-1,3-Dichloropropene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
1,1,2-Trichloroethane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Tetrachloroethene	480		KL	340		KL	780		KL	13			0.50U	J	C	18			14		
2-Hexanone	25U	J	DK	25U	J	DK	50U	J	DK	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D
Dibromochloromethane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
1,2-Dibromoethane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		

ANALYTICAL RESULTS
Table 1A

Case No. : 33335 SDG No. : Y1FR9
Site : OMEGA CHEM OU2
Lab : SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer : April Martinez ESAT/LDC
Date : 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	OC2-MW2A-W-0-64			OC2-MW6A-W-0-65			OC2-MW5A-W-0-66			OC2-MW9B-W-0-67			OC2-00-W-2-68 FB			OC2-MW8B-W-5-69			OC2-MW8C-W-0-70		
Sample ID :	Y1FS6			Y1FS7			Y1FS8			Y1FS9			Y1FT0			Y1FT1			Y1FT2		
Collection Date :	9/14/2004			9/14/2004			9/14/2004			9/15/2004			9/15/2004			9/15/2004			9/15/2004		
Dilution Factor :	5.0			5.0			10.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Chlorobenzene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Ethylbenzene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.085L	J	B
Xylenes (total)	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Styrene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Bromoform	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
Isopropylbenzene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
1,1,2,2-Tetrachloroethane	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
1,3-Dichlorobenzene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
1,4-Dichlorobenzene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
1,2-Dichlorobenzene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
1,2-Dibromo-3-chloropropane	2.5U	J	DK	2.5U	J	DK	5.0U	J	DK	0.50U	J	D	0.50U	J	D	0.50U	J	D	0.50U	J	D
1,2,4-Trichlorobenzene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		
1,2,3-Trichlorobenzene	2.5U		K	2.5U		K	5.0U		K	0.50U			0.50U			0.50U			0.50U		

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation LImit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample

ANALYTICAL RESULTS
Table 1A

Case No. : 33335 SDG No. : Y1FR9
Site : OMEGA CHEM OU2
Lab : SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer : April Martinez ESAT/LDC
Date : 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	OC2-MW8A-W-0-71			OC2-MW8D-W-0-72			OC2-MW7A-W-0-73			OC2-MW7A-W-1-74			OC2-MW3A-W-0-75			OC2-MW10A-W-0-76			Method Blank		
Sample ID :	Y1FT3			Y1FT4			Y1FT5		D2	Y1FT6		D2	Y1FT7			Y1FT8			VBLK18		
Collection Date :	9/15/2004			9/15/2004			9/16/2004			9/16/2004			9/16/2004			9/16/2004					
Dilution Factor :	2.0			1.0			1.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	1.0U	J	FK	0.50U	J	F	0.50U			0.50U	J	FI	0.50U			0.50U	J	F	0.50U	J	F
Chloromethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Vinyl Chloride	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Bromomethane	1.0U		K	0.50U			0.50U	J	F	0.50U	J	I	0.50U	J	F	0.50U			0.50U		
Chloroethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Trichlorofluoromethane	1.0U		K	0.26L	J	B	0.50U			0.50U	J	I	0.50U			25	J	H	0.50U		
1,1-Dichloroethene	14		K	0.50U			0.50U			0.50U	J	I	0.50U			31	J	H	0.50U		
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0U	J	FK	0.50U	J	F	0.50U	J	F	0.50U	J	FI	0.50U	J	F	71	J	FH	0.50U		
Acetone	10U	J	DK	5.0U	J	D	5.0U	J	D	5.0U	J	DI	5.0U	J	D	5.0U	J	D	5.0U	J	D
Carbon Disulfide	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Methyl Acetate	1.0U	J	EK	0.50U	J	E	0.50U	J	E	0.50U	J	EI	0.50U	J	E	0.50U	J	E	0.50U	J	E
Methylene Chloride	1.0U	J	CEK	0.50U	J	E	0.50U	J	F	0.50U	J	CEI	0.50U	J	F	0.50U	J	E	0.20L	J	B
trans-1,2-Dichloroethene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Methyl tert-Butyl Ether	0.15L	J	BK	0.50U			0.18L	J	B	0.17L	J	BI	0.13L	J	B	0.41L	J	B	0.50U		
1,1-Dichloroethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
cis-1,2-Dichloroethene	5.2		K	0.27L	J	B	1.7			1.6	J	I	0.50U			5.0	J	G	0.50U		
2-Butanone	10U	J	DK	5.0U	J	D	5.0U	J	D	5.0U	J	DI	5.0U	J	D	5.0U	J	D	5.0U	J	D
Bromochloromethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Chloroform	1.0U	J	CK	0.76U	J	C	0.45L	J	B	0.35L	J	BI	0.50U			1.0			0.50U		
1,1,1-Trichloroethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Cyclohexane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Carbon Tetrachloride	1.0U		K	0.15L	J	B	0.20L	J	B	0.15L	J	BI	0.50U			0.17L	J	B	0.50U		
Benzene	1.0U	J	CK	0.50U	J	C	0.50U	J	C	0.50U	J	I	0.50U			0.50U			0.50U		
1,2-Dichloroethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Trichloroethene	25		K	34		L	1.1			0.88	J	I	0.50U			270	J	H	0.50U		
Methylcyclohexane	1.0U	J	FK	0.50U	J	F	0.50U			0.50U	J	FI	0.50U			0.50U	J	F	0.50U		
1,2-Dichloropropane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Bromodichloromethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
cis-1,3-Dichloropropene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
4-Methyl-2-pentanone	10U		K	5.0U			5.0U			5.0U	J	I	5.0U			5.0U			5.0U		
Toluene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
trans-1,3-Dichloropropene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
1,1,2-Trichloroethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Tetrachloroethene	150		KL	1.5			8.2		J	6.1	J	IJ	0.50U	J	C	180	J	H	0.50U		
2-Hexanone	10U	J	DK	5.0U	J	D	5.0U	J	D	5.0U	J	DI	5.0U	J	D	5.0U	J	D	5.0U	J	D
Dibromochloromethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
1,2-Dibromoethane	1.0U	J	FK	0.50U	J	F	0.50U			0.50U	J	FI	0.50U			0.50U	J	F	0.50U		

ANALYTICAL RESULTS
Table 1A

Case No. : 33335 SDG No. : Y1FR9
Site : OMEGA CHEM OU2
Lab : SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer : April Martinez ESAT/LDC
Date : 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	OC2-MW8A-W-0-71			OC2-MW8D-W-0-72			OC2-MW7A-W-0-73			OC2-MW7A-W-1-74			OC2-MW3A-W-0-75			OC2-MW10A-W-0-76			Method Blank		
Sample ID :	Y1FT3			Y1FT4			Y1FT5	D2		Y1FT6	D2		Y1FT7			Y1FT8			VBLK18		
Collection Date :	9/15/2004			9/15/2004			9/16/2004			9/16/2004			9/16/2004			9/16/2004					
Dilution Factor :	2.0			1.0			1.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Chlorobenzene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Ethylbenzene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Xylenes (total)	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Styrene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
Bromoform	1.0U		K	0.50U			0.50U			0.34L	J	BI	0.50U			0.50U			0.50U		
Isopropylbenzene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
1,1,2,2-Tetrachloroethane	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
1,3-Dichlorobenzene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
1,4-Dichlorobenzene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
1,2-Dichlorobenzene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.50U		
1,2-Dibromo-3-chloropropane	1.0U	J	DEK	0.50U	J	DE	0.50U	J	DE	0.50U	J	DEI	0.50U	J	D	0.50U	J	DE	0.50U	J	D
1,2,4-Trichlorobenzene	1.0U		K	0.50U			0.50U			0.50U	J	I	0.50U			0.50U			0.26L	J	B
1,2,3-Trichlorobenzene	1.0U	J	FK	0.50U	J	F	0.50U			0.50U	J	FI	0.50U			0.50U	J	F	0.32L	J	B

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation Limit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample

ANALYTICAL RESULTS
Table 1A

Case No.: 33335 SDG No.: Y1FR9
Site: OMEGA CHEM OU2
Lab: SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer: April Martinez ESAT/LDC
Date: 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type: Low Level Water Samples
For Volatiles

Station Location:	Method Blank			Method Blank			Method Blank			Method Blank			Method Blank			Method Blank			Storage Blank		
Sample ID:	VBLK19			VBLK20			VBLK22			VBLK23			VBLK24			VBLK28			VHBLK97		
Collection Date:																					
Dilution Factor:	1.0			1.0			1.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.50U			0.50U			0.50U			0.50U			0.50U	J	F	0.50U			0.50U		
Chloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Vinyl Chloride	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromomethane	0.15L	J	B	0.078L	J	BF	0.50U			0.059L	J	B	0.50U			0.050L	J	B	0.50U		
Chloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Trichlorofluoromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1-Dichloroethene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50U			0.50U	J	F	0.50U			0.50U			0.50U	J	F	0.50U			0.50U		
Acetone	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	1.9L	J	BD	5.0U	J	D
Carbon Disulfide	0.066L	J	B	0.068L	J	B	0.50U			0.50U			0.061L	J	B	0.094L	J	B	0.50U		
Methyl Acetate	0.50U	J	EF	0.50U	J	E	0.50U	J	E	0.50U	J	E	0.50U	J	E	0.50U	J	E	0.50U	J	E
Methylene Chloride	0.25L	J	B	0.24L	J	BF	0.33L	J	BF	0.37L	J	B	0.20L	J	BE	0.21L	J	B	0.50U	J	C
trans-1,2-Dichloroethene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Methyl tert-Butyl Ether	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1-Dichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
cis-1,2-Dichloroethene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
2-Butanone	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D
Bromochloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chloroform	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1,1-Trichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Cyclohexane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Carbon Tetrachloride	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Benzene	0.50U			0.055L	J	B	0.50U			0.50U			0.062L	J	B	0.057L	J	B	0.50U		
1,2-Dichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Trichloroethene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Methylcyclohexane	0.50U			0.50U			0.50U			0.50U			0.50U	J	F	0.50U			0.50U		
1,2-Dichloropropane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromodichloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
cis-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
4-Methyl-2-pentanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0U	R	AF	5.0U	R	AF
Toluene	0.051L	J	B	0.50U			0.50U			0.058L	J	B	0.50U			0.50U			0.50U		
trans-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1,2-Trichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Tetrachloroethene	0.095L	J	B	0.11L	J	B	0.12L	J	B	0.50U			0.093L	J	B	0.50U			0.50U		
2-Hexanone	0.74L	J	BD	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D
Dibromochloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dibromoethane	0.50U			0.50U			0.50U			0.50U			0.50U	J	F	0.50U			0.50U		

ANALYTICAL RESULTS
Table 1A

Case No. : 33335 SDG No. : Y1FR9
Site : OMEGA CHEM OU2
Lab : SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer : April Martinez ESAT/LDC
Date : 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :	Method Blank			Method Blank			Method Blank			Method Blank			Method Blank			Method Blank			Storage Blank		
Sample ID :	VBLK19			VBLK20			VBLK22			VBLK23			VBLK24			VBLK28			VHBLK97		
Collection Date :																					
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0			1.0		
Volatile Compound	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Chlorobenzene	0.084L	J	B	0.060L	J	B	0.098L	J	B	0.50U			0.50U			0.50U			0.50U		
Ethylbenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Xylenes (total)	0.50U			0.50U			0.50U			0.50U			0.11L	J	B	0.50U			0.50U		
Styrene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromoform	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Isopropylbenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1,2,2-Tetrachloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,3-Dichlorobenzene	0.16L	J	B	0.13L	J	B	0.16L	J	B	0.50U			0.18L	J	B	0.12L	J	B	0.50U		
1,4-Dichlorobenzene	0.20L	J	B	0.16L	J	B	0.19L	J	B	0.50U			0.21L	J	B	0.19L	J	B	0.50U		
1,2-Dichlorobenzene	0.17L	J	B	0.15L	J	B	0.18L	J	B	0.50U			0.17L	J	B	0.14L	J	B	0.50U		
1,2-Dibromo-3-chloropropane	0.50U	J	D	0.50U	J	D	0.50U	J	D	0.50U	J	D	0.50U	J	DE	0.50U	J	D	0.50U	J	D
1,2,4-Trichlorobenzene	0.43L	J	B	0.25L	J	B	0.31L	J	B	0.50U			0.35L	J	B	0.26L	J	B	0.50U		
1,2,3-Trichlorobenzene	0.46L	J	B	0.29L	J	B	0.36L	J	B	0.50U			0.34L	J	BF	0.31L	J	B	0.50U		

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation Limit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample

ANALYTICAL RESULTS
Table 1A

Case No. : 33335 SDG No. : Y1FR9
Site : OMEGA CHEM OU2
Lab : SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer : April Martinez ESAT/LDC
Date : 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples For Volatiles

Station Location :																				
Sample ID :	CRQL																			
Collection Date :																				
Dilution Factor :																				
Volatile Compound	**Result**	**Val**	**Com**																	
Dichlorodifluoromethane	0.50																			
Chloromethane	0.50																			
Vinyl Chloride	0.50																			
Bromomethane	0.50																			
Chloroethane	0.50																			
Trichlorofluoromethane	0.50																			
1,1-Dichloroethene	0.50																			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50																			
Acetone	5.0																			
Carbon Disulfide	0.50																			
Methyl Acetate	0.50																			
Methylene Chloride	0.50																			
trans-1,2-Dichloroethene	0.50																			
Methyl tert-Butyl Ether	0.50																			
1,1-Dichloroethane	0.50																			
cis-1,2-Dichloroethene	0.50																			
2-Butanone	5.0																			
Bromochloromethane	0.50																			
Chloroform	0.50																			
1,1,1-Trichloroethane	0.50																			
Cyclohexane	0.50																			
Carbon Tetrachloride	0.50																			
Benzene	0.50																			
1,2-Dichloroethane	0.50																			
Trichloroethene	0.50																			
Methylcyclohexane	0.50																			
1,2-Dichloropropane	0.50																			
Bromodichloromethane	0.50																			
cis-1,3-Dichloropropene	0.50																			
4-Methyl-2-pentanone	5.0																			
Toluene	0.50																			
trans-1,3-Dichloropropene	0.50																			
1,1,2-Trichloroethane	0.50																			
Tetrachloroethene	0.50																			
2-Hexanone	5.0																			
Dibromochloromethane	0.50																			
1,2-Dibromoethane	0.50																			

ANALYTICAL RESULTS
Table 1A

Case No. : 33335 SDG No. : Y1FR9
Site : OMEGA CHEM OU2
Lab : SHEALY ENVIRONMENTAL SERVICES, INC.
Reviewer : April Martinez ESAT/LDC
Date : 08/02/2006

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Low Level Water Samples
For Volatiles

Station Location :																							
Sample ID :	CRQL																						
Collection Date :																							
Dilution Factor :																							
Volatile Compound	**Result**	**Val**	**Com**																				
Chlorobenzene	0.50																						
Ethylbenzene	0.50																						
Xylenes (total)	0.50																						
Styrene	0.50																						
Bromoform	0.50																						
Isopropylbenzene	0.50																						
1,1,2,2-Tetrachloroethane	0.50																						
1,3-Dichlorobenzene	0.50																						
1,4-Dichlorobenzene	0.50																						
1,2-Dichlorobenzene	0.50																						
1,2-Dibromo-3-chloropropane	0.50																						
1,2,4-Trichlorobenzene	0.50																						
1,2,3-Trichlorobenzene	0.50																						

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation LImit, N/A - Not Applicable, NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank, TB - Trip Blank, BG - Background Sample

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR ORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Low Concentration Organic Data Review," June 2001.

U	The analyte was analyzed for, but was not detected above the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
L	Indicates results which fall below the Contract Required Quantitation Limit. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was not detected above the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
R	The sample results are unusable. The analyte may or may not be present in the sample.

Table 2
Calibration Summary

Case No.: 33335
SDG No.: Y1FR9
Site: Omega Chem OU2
Laboratory: Shealy Environmental Services (SHEALY)
Reviewer: April Martinez, ESAT/LDC
Date: August 2, 2006

RELATIVE RESPONSE FACTORS (RRF)

	RRF	RRF	RRF	RRF	RRF
Analysis date:	9/17/04	9/18/04	9/19/04	9/20/04	9/22/04
Analysis time:	14:54-	09:40	10:46	09:22	08:38
GC/MS I.D.:	MSD8	MSD8	MSD8	MSD8	MSD8
Analyte	Init.	Cont.	Cont.	Cont.	Cont.
Acetone	0.029	0.034	0.023	0.027	0.028
2-Butanone	0.025	0.025	0.020	0.025	0.028
2-Hexanone	0.047	-----	0.038	0.044	-----
1,2-Dibromo-3-chloropropane	0.031	0.030	0.025	0.032	0.032
2-Butanone-d5	0.026	0.024	0.019	0.022	0.024
2-Hexanone-d5	0.041	0.040	0.029	0.033	0.034

	RRF	RRF	RRF	RRF	RRF
Analysis date:	9/24/04	9/27/04	9/23/04	9/24/04	9/28/04
Analysis time:	12:46-	10:26 -	10:26	16:02	07:02
GC/MS I.D.:	MSD8	MSD8	MSD8	MSD8	MSD8
Analyte	Init.	Init.	Cont.	Cont.	Cont.
Acetone	0.029	0.024	0.023	0.030	0.023
2-Butanone	0.024	0.021	0.023	0.027	0.018
2-Hexanone	0.040	0.031	0.037	-----	0.031
1,2-Dibromo-3-chloropropane	0.025	0.021	0.028	0.035	0.023
2-Butanone-d5	0.022	0.019	0.021	0.026	0.019
2-Hexanone-d5	0.031	0.025	0.029	0.041	0.027
4-Methyl-2-pentanone	-----	-----	-----	-----	0.004

PERCENT RELATIVE STANDARD DEVIATIONS (%RSD)

	%RSD	%RSD	%RSD
Analysis Date:	9/17/04	9/24/04	9/27/04
Analysis Time:	14:54-	12:46-	10:26 -
GC/MS I.D.:	MSD8	MSD8	MSD8
Analyte	Init.	Init.	Init.
Methyl acetate	38.2	33.2	34.3
Methylene chloride	-----	47.2	-----
1,2-Dibromo-3-chloropropane	-----	52.0	-----

PERCENT DIFFERENCES (%D)

	%D	%D	%D	%D
Analysis Date:	9/18/04	9/19/04	9/20/04	9/22/04
Analysis Time:	09:40	10:46	09:22	08:38
GC/MS I.D.:	MSD8	MSD8	MSD8	MSD8
Analyte	Cont.	Cont.	Cont.	Cont.
Dichlorodifluoromethane	+37.2	-----	-----	-----
Methyl acetate	-----	-42.7	-----	-----
Bromomethane	-----	------	+37.6	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	-----	-----	+36.2	-----
Methylene chloride	-----	-----	+41.6	+36.0

	%D	%D
Analysis Date:	9/24/04	9/28/04
Analysis Time:	16:02	07:02
GC/MS I.D.:	MSD8	MSD8
Analyte	Cont.	Cont.
Dichlorodifluoromethane	+36.2	-----
1,1,2-Trichloro-1,2,2-trifluoroethane	+32.8	-----
Methylcyclohexane	+37.9	-----
1,2-Dibromoethane	+30.8	-----
1,2,3-Trichlorobenzene	+33.6	-----
4-Methyl-2-pentanone	-----	-93.1

+ = RRF biased low; - = RRF biased high.

ASSOCIATED SAMPLES AND METHOD BLANKS

Initial, 9:17/04:	Y1FR9, Y1FS0 through Y1FS9, Y1FT0, Y1FT2, Y1FT5, Y1FT7, Y1FS0DL through Y1FS8DL, Y1FT3DL, Y1FT4DL; method blanks VBLK18, VBLK19, VBLK20, VBLK22, VBLK23
Cont., 9/18/04:	Y1FR9, Y1FS0DL through Y1FS8DL; method blank VBLK18
Cont., 9/19/04:	Y1FS1; method blank VBLK19
Cont., 9/20/04:	Y1FS0, Y1FS2 through Y1FS8, Y1FT5, Y1FT7; method blank VBLK20
Cont., 9/22/04:	Y1FS9, Y1FT0, Y1FT2; method blank VBLK22
Cont., 9/23/04:	Y1FT1, Y1FT3DL, Y1FT4DL; method blank VBLK23
Initial, 9/24/04:	Y1FT3, Y1FT4, Y1FT6, Y1FT8; method blank VBLK24
Cont., 9/24/04:	Y1FT3, Y1FT4, Y1FT6, Y1FT8; method blank VBLK24
Initial, 9/27/04:	Method blank VBLK28; storage blank VHBLK97
Cont., 9/28/04:	Method blank VBLK28; storage blank VHBLK97.

EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 33335
DAS No:
SDG No: Y1FR9 L

Date Shipped:	09/14/2004
Carrier Name:	FedEx
Airbill:	829724484115
Shipped to:	Shealy Environmental 106 Vantage Point Drive Cayce SC 29033 (803) 791-9700

Chain of Custody Record

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	Dan Jablonski	9/14/04 1700		
2				
3				
4			M. Shealy Walton	9/15/04 0900

Sampler Signature: Dan Jablonski

For Lab Use Only
Lab Contract No: 68W01040
Unit Price: $430.00
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
Y1FR9	Ambient Blank/ Dan Jablonski	L/G	VOA (21)	(HCL) (3)	OC2-00-W-2-57	S: 09/13/2004	9:55		OK
Y1FS0	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW4A-W-0-58	S: 09/13/2004	10:45	MY1FS0	
Y1FS1	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(HCL) (5)	OC2-MW4B-W-0-59	S: 09/13/2004	12:45	MY1FS1	
Y1FS2	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW4B-W-1-60	S: 09/13/2004	12:45	MY1FS2	
Y1FS3	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(HCL) (5)	OC2-MW4C-W-0-61	S: 09/13/2004	14:30	MY1FS3	
Y1FS4	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(HCL) (5)	OC2-MW1B-W-0-62	S: 09/14/2004	8:15	MY1FS4	
Y1FS5	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(HCL) (5)	OC2-MW1A-W-0-63	S: 09/14/2004	8:50	MY1FS5	
Y1FS6	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW2A-W-0-64	S: 09/14/2004	9:55	MY1FS6	
Y1FS7	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(HCL) (5)	OC2-MW6A-W-0-65	S: 09/14/2004	11:10	MY1FS7	
Y1FS8	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(HCL) (5)	OC2-MW5A-W-0-66	S: 09/14/2004	12:30	MY1FS8	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 1.8, 1.2	Chain of Custody Seal Number: N/a
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

TR Number: 9-042235727-091404-0002

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 33335
DAS No:
SDG No: Y1FR9 L

Date Shipped:	09/15/2004
Carrier Name:	FedEx
Airbill:	829724484192
Shipped to:	Shealy Environmental 106 Vantage Point Drive Cayce SC 29033 (803) 791-9700

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Dan Jablonski	9/15/04 1700		
2			
3			
4		M Shae Wolfe	9/16/04 0845

Sampler Signature: Dan Jablonski

For Lab Use Only

Lab Contract No: 68-D01-0120
Unit Price: $ 430.00
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
Y1FS9	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(HCL) (5)	OC2-MW9B-W-0-67	S: 09/15/2004	8:45	MY1FS9	OK
Y1FT0	Ambient Blank/ Dan Jablonski	L/G	VOA (21)	(HCL) (3)	OC2-00-W-2-68	S: 09/15/2004	9:15		
Y1FT1	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(HCL) (10)	OC2-MW8B-W-5-69	S: 09/15/2004	9:45	MY1FT1	
Y1FT2	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW8C-W-0-70	S: 09/15/2004	10:40	MY1FT2	
Y1FT3	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW8A-W-0-71	S: 09/15/2004	11:30	MY1FT3	
Y1FT4	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW8D-W-0-72	S: 09/15/2004	12:30	MY1FT4	

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 16.8, 4.3	Chain of Custody Seal Number: N/A
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

TR Number: 9-042235727-091504-0002

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 33335
DAS No:
SDG No: Y1FR9, Y1FT9

L

Date Shipped:	09/16/2004
Carrier Name:	FedEx
Airbill:	829724484229
Shipped to:	Shealy Environmental 106 Vantage Point Drive Cayce SC 29033 (803) 791-9700

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	9/16/04 1700		
2			
3			
4			9/17/04 0900

Sampler Signature:

For Lab Use Only

Lab Contract No: 68W01052
Unit Price: $43.00
Transfer To:
Lab Contract No:
Unit Price: 8/3/2007

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
Y1FT5	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW7A-W-0-73	S: 09/16/2004	8:00	MY1FT5	OK
Y1FT6	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW7A-W-1-74	S: 09/16/2004	8:00	MY1FT6	
Y1FT7	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW3A-W-0-75	S: 09/16/2004	9:00	MY1FT7	3 vials broken
Y1FT8	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW10A-W-0-76	S: 09/16/2004	10:00	MY1FT8	
Y1FT9	Ground Water/ Dan Jablonski	L/G	BNA (21), VOA (21)	(Ice Only) (5)	OC2-MW11A-W-0-77	S: 09/16/2004	10:45	MY1FT9	

SDG Y1FR9 Field Sample

Shipment for Case Complete?Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 1.2°C	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y

BNA = CLP TCL Semivolatiles, VOA = CLP TCL Volatiles

TR Number: 9-042235727-091604-0002

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Rose Fong/R9/USEPA/US
07/27/2006 04:56 PM

To Santiago Lee/R9/USEPA/US@EPA
cc Doug Lindelof/R9/USEPA/US@EPA
bcc
Subject Fw: Sample preservation question on Omega Chemical Case 33335

Maybe this will help ease the pain of qualifying the sample.
----- Forwarded by Rose Fong/R9/USEPA/US on 07/27/2006 04:52 PM -----

Daniel.Jablonski@CH2M.com
07/27/2006 04:00 PM

To Rose Fong/R9/USEPA/US@EPA
cc tom.perina@ch2m.com, victoria.taylor@ch2m.com
Subject RE: FW: Sample preservation question on Omega Chemical Case 33335

Actually, Y1FT6 is a field duplicate of Y1FT5, and yes we did collect samples from this well (MW7) on a quarterly basis and now semi-annual basis. I looked at the VOCs data and they are comparable.

Dan

-----Original Message-----
From: Fong.Rose@epamail.epa.gov [mailto:Fong.Rose@epamail.epa.gov]
Sent: Thursday, July 27, 2006 3:51 PM
To: Jablonski, Daniel/LAC
Cc: Perina, Tom/RIV; Taylor, Victoria/BAO
Subject: Re: FW: Sample preservation question on Omega Chemical Case 33335

Thanks for the documentation. Regarding Y1FT6, no further detail is available on how pH was measured. Was this a quarterly monitoring, so that you might have additional data points for this location?

Daniel.Jablonski@CH2M.com wrote on 07/27/2006 02:14:56 PM:

> Rose,
>
> Sample IDS Y1FS0, Y1FS2, Y1FS6, and Y1FT2 through Y1FT8 were analyzed
> for SVOCs and VOCs through the CLP program (see attached COCs). Sample

> bottles for SVOCs included two 1-liter ambers (unpreserved or ice only;
> sample bottles for VOCs included three 40-mil VOAs (pre-preserved w/
> HCL).
>
> The COCs show "ice only" for Sample IDs Y1FT3, Y1FT4, Y1FT7, and Y1FT8.
> This was likely due to a glitch in the Forms II Lite program, I actually
> remember this happening before. All VOAs were pre-preserved with HCL.
>
> Not sure what happened to Y1FT6. Did they measure pH in the SVOC ambers
> instead of the pre-preserved VOAs?

>
> Hope this helps.
> Let me know if you have any questions.
>
> Daniel Jablonski
> Project Scientist
> CH2M HILL
> 555 South Flower Street, Suite 3550
> Los Angeles, CA 90071
> 213.228.8271 (direct)
> 949.307.4364 (cell)
> 714.424.2135 (fax)
> Daniel.Jablonski@ch2m.com
>
>
>
>
>
> -----Original Message-----
> From: Perina, Tom/RIV
> Sent: Thursday, July 27, 2006 1:29 PM
> To: Jablonski, Daniel/LAC
> Cc: Taylor, Victoria/BAO
> Subject: RE: Sample preservation question on Omega Chemical Case 33335
>
>
> Dan,
>
> can you please look into this and get back to Rose?
>
> Tom
>
>
> -----Original Message-----
> From: Fong.Rose@epamail.epa.gov [mailto:Fong.Rose@epamail.epa.gov]
> Sent: Thursday, July 27, 2006 12:55 PM
> To: Taylor, Victoria/BAO; Perina, Tom/RIV
> Cc: Lichens.Christopher@epamail.epa.gov
> Subject: Sample preservation question on Omega Chemical Case 33335
>
> We're finally completing the data reviews for the set of old CLP
cases,
> and have the following question on one SDG. The reports should be
> provided within the next two weeks.
> For samples Y1FS0, Y1FS2, Y1FS6, and Y1FT2 through Y1FT8, the chain of

> custody records (COC) stated that samples were "Ice Only" whereas the
> laboratory SDG Narrative indicated that the pH was <2 (i.e., preserved

> with HCl). The laboratory has reviewed the instrument run logs (p.
1205
> to 1217 in data package) and verified that sample pH was <2 except for
> Y1FT6 (pH = 7). Please verify the sampling documentation whether
> samples listed above were preserved with HCl. Thanks.
>
> [attachment "OU2 R9 Forms II Lite 09132004_09162004.pdf" deleted by
> Rose Fong/R9/USEPA/US]

Y1FR9.WK4

Shealy Environmental Services, Inc.

Contract Number: 68W01040
Date: 07/14/2006

SDG Narrative

Case 33335
SDG Y1FR9

EPA Sample Numbers

EPA Sample Number	Volatile Fraction	Dilution/ Reanalysis	BNA Fraction	Dilution/ Reanalysis	PEST Fraction	Dilution/ Reanalysis	pH of volatile samples
Y1FR9	Yes	No	No	No	No	No	<2
Y1FS0	Yes	Yes	Yes	No	No	No	<2
Y1FS1	Yes	Yes	Yes	No	No	No	<2
Y1FS2	Yes	Yes	Yes	No	No	No	<2
Y1FS3	Yes	Yes	Yes	No	No	No	<2
Y1FS4	Yes	Yes	Yes	No	No	No	<2
Y1FS5	Yes	Yes	Yes	No	No	No	<2
Y1FS6	Yes	Yes	Yes	No	No	No	<2
Y1FS7	Yes	Yes	Yes	No	No	No	<2
Y1FS8	Yes	Yes	Yes	No	No	No	<2
Y1FS9	Yes	No	Yes	No	No	No	<2
Y1FT0	Yes	No	No	No	No	No	<2
Y1FT1	Yes	No	Yes	No	No	No	<2
Y1FT2	Yes	No	Yes	No	No	No	<2
Y1FT3	Yes	Yes	Yes	No	No	No	<2
Y1FT4	Yes	Yes	Yes	No	No	No	<2
Y1FT5	Yes	No	Yes	No	No	No	<2
Y1FT6	Yes	No	Yes	No	No	No	7
Y1FT7	Yes	No	Yes	No	No	No	<2
Y1FT8	Yes	Yes	Yes	No	No	No	<2

Columns	VOC DB-624, 20m x 0.18mm x 1.0um MSD7: SVOC DB-5MS 30m x 0.25mm x 0.25um MSD4: SVOC RTX-5SILMS 20m x 0.18mm x 0.18um
Trap	VOCARB 3000, 17 cm of packing material

VOA Equation	Concentration = Amt * DF * 25/Vo Where Amt is the on-column amount (ug/L) DF is the dilution factor. Vo is the purge volume (25 mL).
BNA/PEST Equation	Concentration = Amt * DF * Vt/Vo Where Amt is the on-column amount (ng/uL) (ng for PEST) DF is the dilution factor Vt is the volume of the extract (uL), Vo is the volume of the sample (mL)

Sample Receiving

The cooler temperatures were 1.8, 1.2, 6.8, 4.3 and 1.2°C.

1LCF

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS EPA SAMPLE NO.

Y1FS1

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 33335 Client No.: SDG No.: Y1FR9

Lab Sample ID: FI15021-003 Date Received: 09/15/2004

Lab File ID: I1502103 Date Analyzed: 09/19/2004

Purge Volume: 25.0(ML) Dilution Factor: 10.0

GC Column: DB-624 ID: 0.18(MM) Length: 20.0(M)

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		UNKNOWN	2.37	10	J
02		UNKNOWN	2.42	9.3	J
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

1LCF

LOW CONCENTRATION WATER VOLATILE ORGANICS ANALYSIS
DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS EPA SAMPLE NO.

Y1FT8

Lab Name: SHEALY ENVIRONMENTAL Contract: 68W01040

Lab Code: SHEALY Case No.: 33335 Client No.: SDG No.: Y1FR9

Lab Sample ID: FI17023-004 Date Received: 09/17/2004

Lab File ID: I1702304 Date Analyzed: 09/24/2004

Purge Volume: 25.0(ML) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.18(MM) Length: 20.0(M)

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC. (UG/L)	Q
01		UNKNOWN	2.38	0.53	J
02		UNKNOWN	2.42	0.53	J
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Table 9. Volatile Deuterated Monitoring Compounds and the Associated Target Compounds

Chloroethane-d5 (DMC)	1,2-Dichloropropane-d6 (DMC)	1,2-Dichlorobenzene-d4 (DMC)
Dichlorodifluoromethane	Cyclohexane	Chorobenzene
Chloromethane	Methylcyclohexane	1,3-Dichlorobenzene
Bromomethane	1,2-Dichloropropane	1,4-Dichlorobenzene
Chloroethane	Bromodichloromethane	1,2-Dichlorobenzene
Carbon Disulfide		1,2,4-Trichlorobenzene
		1,2,3-Trichlorobenzene

Bromoform-d (DMC)	trans-1,3-Dichloropropene-d4 (DMC)	Chloroform-d (DMC)
Dibromochloromethane	cis-1,3-Dichloropropene	1,1-Dichloroethane
1,2-Dibromoethane	trans-1,3-Dichloropropene	Bromochloromethane
Bromoform	1,1,2-Trichloroethane	Chloroform

2-Butanone-d5 (DMC)	1,1-Dichloroethene-d2 (DMC)	2-Hexanone-d5 (DMC)
Acetone	trans-1,2-Dichloroethene	4-Methyl-2-pentanone
2-Butanone	cis-1,2-Dichloroethene	2-Hexanone

Vinyl Chloride-d3 (DMC)	Benzene-d6 (DMC)	1,1,2,2-Tetrachloroethane-d2 (DMC)
Vinyl Chloride	Benzene	1,1,2,2,-Tetrachlororethane
		1,2-Dibromo-3-chloropropane

1,2-Dichloroethane-d4 (DMC)	Toulene-d8 (DMC)
Trichlorofluoromethane	Trichloroethene
1,1-Dichloroethene	Toluene
1,1,2-Trichloro-1,2,2-trifluoroethane	Tetrachloroethene
Methyl Acetate	Ethylbenzene
Methylene Chloride	Xylenes (total)
Methyl tert-Butyl Ether	Styrene
1,1,1-Trichloroethane	Isopropylbenzene
Carbon Tetrachloride	
1,2-Dichloroethane	

USEPA Contract Laboratory Program National Functional Guidelines for Low Concentration Organic Data Review (EPA 540-R-00-006, June 2001)

Data File: \\organics\DD\chem\msd8.i\8sep2004.b\I1502104.D

Date : 20-SEP-2004 16:40

Client ID: Y1FS2 Instrument: msd8.i

Sample Info: 8sep2004.b,FI15021-004, 10X

Purge Volume: 25.0 Operator: DLB

Column phase: DB-624 Column diameter: 0.18

21 2-Butanone Concentration: 7.6 ug/L